

## The role of three education centers in promoting entrepreneurship careers for vocational students

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### ABSTRACT

The potential for vocational students to achieve success in entrepreneurship is considerable, especially since they have acquired specific skills that are in line with their area of specialization since the beginning of their vocational schooling. However, schools cannot be alone in promoting entrepreneurial careers among vocational students. This study aims to measure the role of three educational centers, in influencing self-efficacy, entrepreneurial intention and career choice as an entrepreneur. This study was approached with a quantitative approach using structural equation modeling (SEM), the sample in the study was 354 vocational students. Data analysis through four stages, namely exploratory factor analysis, normality and outlier tests, confirmatory factor analysis and hypotheses testing (structural model). The results showed that the three education centers significantly influence self-efficacy and entrepreneurial intention which in turn can encourage students to choose a career as an entrepreneur. This research contributes to the understanding of how the three education centers can be an important catalyst in shaping a generation of resilient and innovative entrepreneurs.

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## 1. INTRODUCTION

Vocational school students have great potential to become successful entrepreneurs if they are equipped with the right knowledge, skills and support, especially since they have been equipped with specific skills according to their specialization when they first enter vocational schools [1], [2]. Vocational school graduates generally have adequate skills in accordance with the field of study taken, so students can work immediately. However, the fact is that not all vocational school graduates can easily find a job. Quoting the Central Bureau of Statistics of the Republic of Indonesia (BPS RI) in August 2022, ironically vocational school graduates, who are schools preparing students to enter the industrial world, are ranked first in the unemployment rate. However, the journey to becoming an entrepreneur is not as easy as it seems, and many factors influence the success of an entrepreneurial career [3], [4].

Entrepreneurship education significantly influences the direction of students' future professional paths in vocational high schools [5], [6]. Vocational school is a strategic place to prepare young people to enter the world of work or even start their own business. In an ever-changing and competitive era, entrepreneurs have an important role in creating jobs, developing innovation, and contributing to the economic growth of society [7], [8]. Entrepreneurship education in vocational schools has a major impact in shaping students'

entrepreneurial mindset and skills. Regardless of the type of business that students will undertake, an understanding of business principles, planning, management, marketing and innovation is essential. Quality entrepreneurship education could assist students develop this knowledge and skills, and also give them the confidence to run their own ventures [9], [10].

However, entrepreneurship education in vocational schools may vary in quality and scope. Some vocational schools may have comprehensive programs, while others may only offer basic training [2], [11]. It matters to evaluate the extent to which entrepreneurship education in vocational schools can play a role in helping students succeed in their entrepreneurial careers. In the context of promoting entrepreneurial careers among students, the role of schools through various entrepreneurship education programs is not enough, various studies encourage the role of family and environment in promoting entrepreneurial careers [10], [12]. This means that it takes the role of three educational centers, namely entrepreneurship education, family support and community environment in encouraging self-efficacy and entrepreneurial intentions which further facilitate students in choosing a career as an entrepreneur.

Family support is one of the key factors in helping students develop entrepreneurial careers [13], [14]. Families play an important role in providing moral encouragement, financial support, and tools for career exploration [15], [16]. When families support students' entrepreneurial interests and ambitions, students tend to feel more motivated and confident in achieving their goals. The community environment in which students live also plays an important role in shaping their views and opportunities regarding entrepreneurial careers [5], [8]. Communities that support entrepreneurship, with community platforms, access to business resources and collaboration opportunities, can provide a supportive environment for students' entrepreneurial career development [17], [18].

Although many studies have examined models that can be used to encourage entrepreneurial careers among vocational students, not many have examined the role of three educational centers (entrepreneurship education, family support, and community environment) simultaneously in an effort to increase students' self-efficacy and entrepreneurial intentions in promoting career paths as entrepreneurs. For example, research by Gorgievski *et al.* [19] examined entrepreneurship value as factors influencing entrepreneurial intentions in promoting career paths as entrepreneurs of students, by using the theory of planned behavior (TPB) as a mediating variable, but did not examine other factors. Research by Adha *et al.* [9] also proposed that entrepreneurship education and family support can promote entrepreneurial careers through entrepreneurial intentions but did not include community environment as a predictor variable. Meanwhile, Gao *et al.* [20] stated that a conducive environment can foster student creativity and this is important in the context of entrepreneurial success. This research tries to fill the gap in previous research, which aims to explore the important role of three main variables, entrepreneurship education (EE), family support (FS), and community environment (CE), in strengthening self-efficacy (SE) and entrepreneurship intention (EI) to promote entrepreneurship career choice (ECC) among vocational students. Through an in-depth understanding of the impact of these variables, this study is expected to provide valuable insights that can assist schools, families, and communities in supporting the entrepreneurial career development of vocational students. This research is important as it has direct implications for efforts to improve the chances and success of vocational students in pursuing their entrepreneurial careers, with a better understanding schools can develop more effective and relevant education and support programs.

## 2. LITERATURE REVIEW

### 2.1. Entrepreneurship education

Some theoretical viewpoints, such as self-determination theory, human capital theory, and entrepreneurial self-efficacy theory suggest that entrepreneurship education is positively related to students' entrepreneurial intentions of students [7]. This is due to the increased knowledge and skills provided by entrepreneurship education as well as the motivational drive to develop their abilities in the context of an entrepreneurial career. Entrepreneurship education has become an important part of equipping individuals with the knowledge and skills needed to succeed in the business world [7], [21]. Entrepreneurship education helps individuals understand business principles, design business plans, manage risks, and develop effective marketing strategies. Entrepreneurship education has an effect on increasing students' self-efficacy in the context of entrepreneurship [3], [21], [22]. Through entrepreneurship education, students learn about the skills required to become successful entrepreneurs, which in turn increases their self-efficacy to pursue an entrepreneurial career. The higher the self-efficacy, the more likely individuals are to take the necessary actions to start and run a business.

Empirical research shows that entrepreneurship education positively influences entrepreneurial intentions [3], [9]. Through practical learning and real-life classroom experiences, students have the opportunity to develop interest to pursue an entrepreneurial career. In addition, entrepreneurship education helps reduce the fear of risk and uncertainty often associated with entrepreneurship [23], [24]. The higher the

entrepreneurial intention, the more likely individuals are to take concrete steps to start their venture [25], [26]. Career choice as an entrepreneur is an important step in one's journey towards entrepreneurship. Entrepreneurship education has a significant effect on career choice as an entrepreneur [4], [7]. Entrepreneurship education gives students knowledge and resources to understand business opportunities and problems, this helps them decide if they want to be entrepreneurs. Entrepreneurship education plays a very important role in shaping self-efficacy, entrepreneurial intention, and career choice as an entrepreneur [21], [24], [27]. The positive affect of entrepreneurship education in improving self-efficacy, entrepreneurial intention, and career choice as an entrepreneur is key to helping individuals achieve success in the competitive business world. Referring on this explanation, hypotheses 1-3 are formulated as follows; H1: EE affects SE, H2: EE affects EI, and H3: EE affects ECC.

## 2.2. Family support

Family support is a key factor in influencing people's attitudes and behaviors, including in the context of entrepreneurship [13], [14]. In the literature, many studies have revealed significant relationships between family support and self-efficacy, entrepreneurial intention, and career choice as an entrepreneurs [28], [29]. These factors are interconnected and have a strong impact on one's entrepreneurial career development. Family support, both in the form of moral support and practical support, can influence the development of individual self-efficacy [9], [28]. Support from parents and other family members provides positive encouragement that enables individuals to feel more competent and capable of achieving their goals in an entrepreneurial career. Various studies have found that support from family members in the form of emotional support, financial support, and support in the form of guidance, is significantly associated with increased entrepreneurial intentions in students [14], [30]. Choosing a career as an entrepreneur is a complex decision that is influenced by many factors. Family support can act as a determining factor in this decision [31], [32]. When a person feels supported by their family in pursuing an entrepreneurial career, they are more likely to choose to become an entrepreneur [16], [33]. Research conducted by Bloemen-Bekx *et al.* [13] highlighted the important role of family support in choosing a career as an entrepreneur, the results of their research show that support from the family, especially in terms of providing moral encouragement and financial support, significantly influences an individual's decision to choose an entrepreneurial career as a primary choice. Based on this explanation, hypotheses 4-6 are formulated as follows; H4: FS affects SE, H5: FS affects on EI, and H6: FS affects on ECC.

## 2.3. Community environment

The community environment can play an important role in shaping one's self-efficacy, especially in the context of entrepreneurship [7], [33]. In a study conducted by Liñán and Chen [34], they found that environmental factors such as access to entrepreneurial resources, social support from community members, and business collaboration opportunities can increase individuals' self-efficacy in their ability to start and grow a venture. Environments that facilitate idea exchange, financial support, and entrepreneurial training provide a positive boost to the self-efficacy of aspiring entrepreneurs [18], [35]. The community environment also has a strong influence on individual entrepreneurial intentions. Research by Liñán and Fayolle [36] shows that environments that value entrepreneurship and provide positive role models of successful entrepreneurs can stimulate entrepreneurial intentions. Environments that promote an entrepreneurial culture often result in individuals who are more likely to consider an entrepreneurial career as an attractive option [33], [37]. In addition, factors such as access to mentors and strong business networks in the community can also increase entrepreneurial intentions. Community environments that support entrepreneurship tend to create more opportunities for individuals to choose a career as an entrepreneur [38]. This is especially true for individuals who have an interest in entrepreneurship but need a supportive environment to take that step. Based on this explanation, hypotheses 7-9 are formulated as follows; H7: CE affects SE, H8: CE affects EI, and H9: CE affects ECC.

## 2.4. Self-efficacy

Self-efficacy has been the focus of attention in the research on self-employment and career development [32], [39]. Stimulation of high self-efficacy creates confidence in individuals to overcome challenges and face risks associated with entrepreneurship [29], [33]. Research by Igwe *et al.* [40] found that someone with high self-efficacy tend to have stronger entrepreneurial intentions. They believe that they are capable of overcoming challenges and succeed in running their business. Further research by Ajzen [41] suggests that self-efficacy affects entrepreneurial intention through two pathways: direct influence and influence through perceived constraints. High self-efficacy increases entrepreneurial intention directly, while low self-efficacy can lead to high perceived constraints, which in turn can reduce entrepreneurial intention. Self-efficacy also has an effect on career choice as an entrepreneur [21], [29]. In this context, self-efficacy can be considered as a driver that influences a person to choose an entrepreneurial career path. Students who have

a strong belief in their ability to succeed as entrepreneurs are more likely to choose to pursue an entrepreneurial career [19], [42]. Students with high self-efficacy tend to be more persistent and unyielding in the face of obstacles. Based on this explanation, the 10th and 11th hypotheses are formulated as follows; H10: SE affects EI and H11: SE affects ECC.

### 2.5. Entrepreneurship intention

Entrepreneurial intention, which is a person's desire and commitment to start and run their own business, has a significant role in influencing a person to choose a career as an entrepreneur [35], [43]. A number of studies have shown that entrepreneurial intention can serve as an important predictor of career choice as an entrepreneur. Apart from other factors that influence career decisions, such as education, previous work experience, and family environment, entrepreneurial intention is often a key driver in motivating individuals to start their own business [19], [35], [44]. A strong intention to become an entrepreneur can be a strong factor in career decision making. Based on this explanation, the 12th hypothesis is formulated as follows; H12: EI affects ECC.

## 3. METHOD

### 3.1. Design

Identifying the relationship between the research variables is accomplished through the utilization of a quantitative research design in conjunction with the structural equation modeling (SEM) analytical approach. SEM is a statistical method for examining the structural relationships between variables by combining multiple regression and factor analysis. It is used to test and estimate causal relationships using both observed and latent variables. This research design is employed to ascertain the degree to which the three centers of education (specifically entrepreneurship education, family support, and community environment), self-efficacy, and entrepreneurship intention, interact and impact vocational students' decision to pursue an entrepreneurial career as shown in Figure 1.

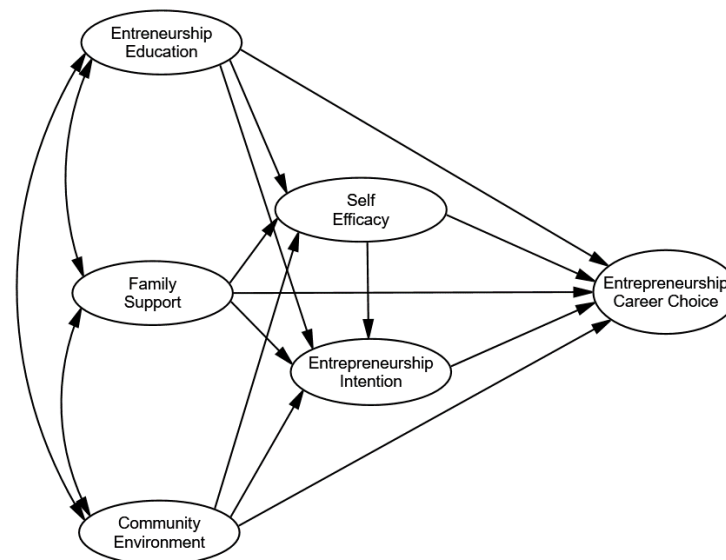


Figure 1. Framework model

### 3.2. Participants and data collection

The study included students from vocational high schools located in Malang City, Batu City, and Malang Regency. The study included a total of 354 participants, who were students from various vocational schools picked at random. The students were chosen as participants based on certain inclusion criteria, including their active involvement in the vocational school's education program and their expressed interest in pursuing an entrepreneurial career. Participants are not obligated to take part, and their identities are preserved as anonymous to uphold the research's ethical integrity. The following is an overview of detailed demographic data pertaining to respondents: i) grade levels, 12th: 39.83% (141), 11th: 33.33% (118), and 10th: 26.84% (95);

ii) gender, female: 58.76% (208), and male: 146 (41.24%); iii) parent's education, Ph.D.: 5.08% (18), master: 9.89% (35), bachelor: 33.53% (118), diploma: 13.57% (48), high school: 27.40% (97), secondary school: 8.19% (29), and primary school: 2.54% (9); and iv) parents' job, general employees: 31.92% (113), military/police: 21.19% (75), civil servants: 22.60% (80), entrepreneur: 17.51% (62), and farmer: 6.78% (24).

The questionnaire that was distributed had closed-ended questions, all of which were modified from prior studies. Students were given 28 question items in total. There are 4 answers for each item (strongly disagree - strongly agree). The EE questionnaire (6 items) was modified refer on the indicators mentioned by Denanyoh *et al.* [45]. The FS questionnaire (3 items) is modified from the indicators that provided by Farrukh *et al.* [28]; Utari and Sukidjo [31]. The CE questionnaire (6 items) was adapted based on the indicators mentioned by Aliabadi *et al.* [37]. The SE questionnaire (3 items) were adapted from indicators that stated by Bandura [46]. Meanwhile, the EI questionnaire (6 items) was modified refer on indicators formulated by Liñán and Chen [34]. The ECC questionnaire (4 items) was modified from indicators provided by Tiedeman and O'Hara [47]; that was also used by Yin and Jamaludin [48].

### 3.3. Statistical analysis

The acquired data examined by SEM approaches, employing the statistical software SPSS 24.0 and AMOS 24.0. Exploratory factor analysis (EFA) is conducted using the SPSS 24 program to extract many components by VARIMAX rotation. The method starts with the initial set of items derived from the EFA. An initial EFA was performed on the major dimension measures in the exploratory sample to ascertain the construct's dimensions. The study utilized principal component factoring with oblimin rotation. Furthermore, performing normality and outlier testing with AMOS 24.0, if there are no issues with the data's normality or outliers, then it is possible to go on to the subsequent phase, which is the evaluation of the measurement model. The model's validity and dependability could be assessed by employing confirmatory factor analysis (CFA) with AMOS 24.0. The last stage involves evaluating the structural model in order to evaluate the hypotheses that have been made [49], [50].

## 4. RESULTS AND DISCUSSION

### 4.1. Exploratory factor analysis

In this study, a technique known as corrected item total correlations, was applied in order to improve certain scale items. The results of EFA can be influenced by a number of factors, some of which can be removed from consideration with the assistance of this analysis. As a direct consequence of this, the coefficients of all the items in the dataset were set to the suggested value of 0.40, which is shown in Table 1 and was published by Hair *et al.* [51]. In addition, we used Cronbach's alpha with a minimally respectable degree of 0.70 to maintain the internal consistency and validity of the constructs that were the focus of our inquiry [52]. Despite this, each and every one of the research structures' coefficients is higher than the criterion that was established, and the results are provided in Table 1. According to Cain *et al.* [53] the values of kurtosis and skewness for each item fell somewhere within the range of -2 to +2. Based on these findings, it appears that every one of the objects that were chosen followed a normal distribution. Meanwhile, Kaiser-Meyer-Olkin (KMO) ran a test of sample adequacy and Bartlett's test of sphericity on the collected data in order to establish whether or not it was appropriate to carry out an EFA analysis on the information. Because the KMO value for the dataset was more than the cutoff value of 0.60, the findings given in Table 1 suggest that the data were suitable enough for factor analysis [49], [51]. The fact that Bartlett's test of sphericity produced a result with a p-value of less than 0.05 provides additional evidence that it is permissible to perform factor analysis on the dataset.

Table 1. Exploratory factor analysis

Factor	Eigen values	Explained variance (%)	KMO	BTS (p)	r	$\alpha$
Entrepreneurship education	7.091	16.355	0.841	308.635 (0.000)	0.609–0.737	0.824
Family support	5.428	12.192	0.813	235.814 (0.000)	0.662–0.851	0.855
Community environment	4.833	11.548	0.892	384.726 (0.000)	0.722–0.874	0.913
Self-efficacy	3.195	8.427	0.826	286.691 (0.000)	0.614–0.782	0.837
Entrepreneurship intention	1.822	6.181	0.874	362.823 (0.000)	0.688–0.819	0.874
Entrepreneurship career choices	1.474	5.274	0.820	257.144 (0.000)	0.631–0.768	0.819

In this research, all the measurement scales were reported by the participants themselves, therefore in order to evaluate the likelihood of common method variance, we did a number of tests. When we first started, the first thing that we did was run an EFA with the help of SPSS software. This means that in order to find the bare minimum of factors required to provide a satisfactory explanation for the variation exhibited by the

variables, all of the items from each construct must be loaded concurrently. The findings of the factor analysis showed that there are six factors, all of which have eigenvalues that are more than 1.0. It would appear that the common technique bias is not a problem in this study because the first major component accounted for 16.35% (less than 50%) and the six individual factors accounted for 59.98% of the total variance [54].

#### 4.2. Normality and outlier test

In order to carry out the assumption test, one must first do the normalcy test and then the outlier test. Before beginning work on an in-depth SEM model analysis, it is necessary to perform a comprehensive assumption test. According to the findings of the test to determine whether or not the data are normally distributed, the critical ratio (c.r) value for kurtosis and skewness of each indicator does not exceed  $\pm 2.58$ . Currently, the value of c.r for the multivariate kurtosis line is equal to 2.413. This is the current state of affairs. This suggests that there is no difficulty with the normality of the data at either the univariate or the multivariate levels, as reported by Byrne [50]. Furthermore, the outlier test was carried out in line with the recommendation offered by Blunch [52], which said that there was no multivariate outlier problem if the mahala Nobis distance (MD) value was smaller than chi square. This was the criterion that was adhered to while carrying out the outlier test. The study came to the conclusion that the chi-square value should be 309.52, while the most significant MD value is 183.672.

#### 4.3. Confirmatory factor analysis

According to Hair *et al.* [51], it is important to point out that none of the loading factors shown in Table 2 fell below the threshold of 0.50. Despite this, it is important to note that all of the loading factors shown in Table 3 exceeded this level. According to Hair *et al.* [51], the researchers ran a composite reliability study in order to validate the reliability estimates. This analysis found that all constructs exhibited values that were greater than 0.70, which was the threshold that the researchers had set. Based on the outcomes of this research, it appears that convergent validity can be determined using appropriate methods. In addition, The average variance explained (AVE), which the researchers also computed to demonstrate convergent validity, showed that all of the values exceeded the 0.50 threshold [55]. This indicates that the convergent validity was established.

Table 2. Convergent validity

Factor	Encode	Loading	CR	AVE
Entrepreneurship education	EE1	0.83	0.90	0.59
	EE2	0.80		
	EE3	0.73		
	EE4	0.85		
	EE5	0.75		
	EE6	0.64		
Family support	FS1	0.78	0.85	0.66
	FS2	0.82		
	FS3	0.84		
Community environment	CE1	0.62	0.89	0.58
	CE2	0.87		
	CE3	0.73		
	CE4	0.81		
	CE5	0.73		
	CE6	0.79		
Self-efficacy	SE1	0.73	0.77	0.53
	SE2	0.68		
	SE3	0.78		
Entrepreneurship intention	EI1	0.84	0.90	0.60
	EI2	0.61		
	EI3	0.85		
	EI4	0.88		
	EI5	0.63		
	EI6	0.78		
Entrepreneurship career choices	ECC1	0.86	0.86	0.61
	ECC2	0.80		
	ECC3	0.74		
	ECC4	0.71		

Discriminant validity is a measurement that analyzes the level of comprehension by taking into account a variety of indications that are connected with various different concepts [55]. Hair *et al.* [51], the interaction between elements contained within structures is constrained to the square root of the AVE that is possessed by one of the structures. Table 3 indicates that the square root of the AVE exceeds the correlation

coefficients for each variable. This is something that can be noticed by looking at the value of the square root of the AVE. The idea that discriminant validity has been proved thanks to this finding receives more support.

Table 3. Discriminant validity

Factor	EE	FS	CE	SE	EI	ECC
Entrepreneurship education	0.768					
Family support	0.215	0.812				
Community environment	0.583	0.326	0.762			
Self-efficacy	0.397	0.404	0.385	0.721		
Entrepreneurship intention	0.184	0.127	0.290	0.448	0.775	
Entrepreneurship career choices	0.366	0.191	0.216	0.374	0.294	0.781

The application of CFA on each and every set of constructs served as the methodology for conducting the validity examination of the measuring model. As a result, CFA fit indices are provided in Table 4, have satisfied the established requirement, which was proposed by Byrne [50] and Hair *et al.* [51]. Specifically,  $p=0.054$ ;  $CMIN/df=2.452$ ; goodness of fit index (GFI)=0.917; tucker-lewis index (TLI)=0.935; comparative fit index (CFI)=0.948; root mean square residual (RMR)=0.051; and root mean squared error of approximation (RMSEA)=0.064.

Table 4. Goodness of fit indices

Fit Indices	p	CMIN/df	GFI	TLI	CFI	RMR	RMSEA
Cut of value	> 0.050	< 3.000	> 0.900	> 0.900	> 0.900	< 0.080	< 0.080
Measured Information	0.054 Fit	2.452 Fit	0.917 Fit	0.935 Fit	0.948 Fit	0.051 Fit	0.064 Fit

#### 4.4. Structural model analysis

Based on Table 5, the initial three hypotheses on EE for SE, EI, and ECC showed p values of 0.01 ( $\beta=0.25$ ), 0.00 ( $\beta=0.42$ ), and 0.00 ( $\beta=0.36$ ) respectively, all below the significance level of 0.05, confirming acceptance. Similarly, the subsequent hypotheses on FS for SE, EI, and ECC displayed p values of 0.00 ( $\beta=0.32$ ), 0.00 ( $\beta=0.29$ ), and 0.00 ( $\beta=0.34$ ) respectively, all meeting the significance criteria. The ensuing set of hypotheses regarding CE for SE, EI, and ECC reported p values of 0.01 ( $\beta=0.22$ ), 0.00 ( $\beta=0.41$ ), and 0.00 ( $\beta=0.48$ ) respectively, all below 0.05, affirming their acceptance. Additionally, the study's findings disclosed a significant positive correlation between SE for EI and ECC, supporting the tenth and eleventh hypotheses. Furthermore, data analysis identified a notable positive relationship ( $\beta=0.37$ ,  $p=0.00$ ) between EI and ECC, validating the twelfth hypotheses.

Table 5. Hypotheses examination

Hypotheses	p	Path	Support
H1: EE → SE	0.01	0.25	Yes
H2: EE → EI	0.00	0.42	Yes
H3: EE → ECC	0.00	0.36	Yes
H4: FS → SE	0.00	0.32	Yes
H5: FS → EI	0.00	0.29	Yes
H6: FS → ECC	0.00	0.34	Yes
H7: CE → SE	0.01	0.22	Yes
H8: CE → EI	0.00	0.41	Yes
H9: CE → ECC	0.00	0.48	Yes
H10: SE → EI	0.01	0.24	Yes
H11: SE → ECC	0.01	0.28	Yes
H12: EI → ECC	0.00	0.37	Yes

#### 4.5. Discussion

Research findings show that entrepreneurship education has a positive effect on self-efficacy, entrepreneurial intention, and career choice as an entrepreneur of vocational students [11], [21], [56]. These results strengthen the argument for improving the quality of entrepreneurship education at the vocational high school level to provide better support for students to succeed in their entrepreneurial careers [6], [11], [57]. Entrepreneurship education programs that focus on developing relevant skills and knowledge are likely to give

students the impetus to feel more confident in running their own ventures [25], [27]. Enhanced self-efficacy can help students overcome obstacles and challenges they may face in entrepreneurship. It can encourage them to take necessary risks and try harder to achieve their entrepreneurial goals.

These results emphasize the importance of effective entrepreneurship education in influencing students' self-efficacy and interest in entrepreneurship [24], [58]. Targeted education can help students understand the challenges and opportunities in the world of entrepreneurship, as well as provide them with the necessary knowledge base to start and run their own business. It is shown that students who receive better entrepreneurship education tend to prefer to pursue a career as an entrepreneur compared to those who have limited access to entrepreneurship education [4], [12], [59].

Research findings also support that family support affects self-efficacy, entrepreneurial intention, and career choice as an entrepreneur of vocational students [6], [16], [33]. This underscores the importance of understanding the role of family in shaping students' entrepreneurial career intentions and decisions. The results is consistent with prior studies showing that family support plays an important role in shaping an individual's level of self-efficacy [12], [28]. Family support can create a positive environment where students feel supported, valued, and empowered. Furthermore, strong family support is likely to trigger students' interest in pursuing an entrepreneurial career [29], [30]. A supportive family can provide the encouragement, inspiration, and emotional support necessary to motivate students to consider self-employment as an attractive career choice [13], [14].

Results study also support the hypotheses that community environment has a significant influence on self-efficacy, entrepreneurial intention, and career choice as an entrepreneur by vocational students [8], [33]. Entrepreneurship-supportive community environments, such as the presence of a local business community, access to business resources, and collaboration opportunities, contribute positively to students' increased self-efficacy [60], [61]. These findings support the idea that a community environment that supports self-employment can motivate students to have stronger intentions in starting their own business [18], [62]. These factors create an environment that stimulates and fuels students' interest in becoming entrepreneurs, with the hope that they can contribute to local economic development and create jobs. These results underscore the important role that community environmental factors play in influencing students' career decisions. Support from the community can make an entrepreneurial career a more attractive option for students, especially when they feel supported by their surroundings [63].

Individuals' self-efficacy refers to their belief in their ability to manage and run an entrepreneurial venture. Choosing a career as an entrepreneur often involves taking greater risks than conventional careers, and high self-efficacy can give individuals the confidence to face the challenges and uncertainties that may occur in their business [9], [25], [32]. Therefore, in the context of promoting entrepreneurial careers for vocational students, it is important to strengthen students' self-efficacy as a first step in encouraging them to choose entrepreneurial careers. Entrepreneurial intention reflects the extent to which individuals have the desire and commitment to start and run their own business, where research results also show that individuals with high entrepreneurial intention more likely to choose a career as an entrepreneur as their path of choice [42], [43].

## 5. CONCLUSION

In the context of this study, it is understood that the three educational centers (entrepreneurship education, family support, and community environment), influence self-efficacy, which in turn also significantly influences entrepreneurial intention and career choice as an entrepreneur. These results support the importance of more effective integration of entrepreneurship education in the curriculum of vocational and other schools to encourage greater entrepreneurship career choice. Family support, both moral and material, was also shown to increase students' entrepreneurial efficacy and intentions, which are important in entrepreneurship career choice. A community environment that supports self-employment can create more attractive opportunities for individuals to pursue their entrepreneurial careers, which in turn can provide significant economic benefits to the local community. These findings contribute to the understanding of how the three educational centers can be important catalysts in shaping a generation of resilient and innovative entrepreneurs. Entrepreneurship education in vocational schools can be improved by considering the role of family support and community environment. Educational programs that are more integrated with the role of family, local business community, practical training, and collaboration opportunities can increase students' self-efficacy, entrepreneurial intention, and ultimately, career choice as entrepreneurs.

While the findings of this research provide valuable insights, there are some limitations that need to be noted. This research was only approached with a quantitative approach therefore, it cannot state the ideal form of the three education centers according to the context of the research setting. In addition, the study was limited to a specific sample of vocational school students and may not be generally applicable to a wider population. Based on the findings and limitations of the study, recommendations are formulated for education stakeholders, in order to collaborate the three education centers in seeking entrepreneurship career choices



among vocational students. Furthermore, future researchers can conduct research on similar topics using a qualitative approach so as to describe the ideal form of collaboration of the role of the three education centers in promoting entrepreneurial careers, further researchers can also expand the object of assessment, for example by comparing the role of the three education centers in Indonesia with other countries.

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